



PATENT

01/7

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Mika Gomi et al.  
Serial No.: 09/876,494  
Filing Date: June 7, 2001  
Title: "LIQUID CRYSTAL DISPLAY DEVICE"  
Docket No.: 30821US3

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INFORMATION DISCLOSURE STATEMENT

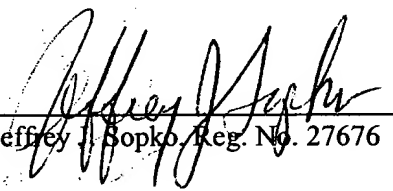
Commissioner for Patents  
Washington, D.C. 20231

Sir/Madam:

In accordance with Rule 56, applicants are aware of the publications listed in the Chinese Office action (copy enclosed) and in the enclosed copy of Patent Office Form 1449. A copy of each of the publications is enclosed herewith.

Each item of information cited on the Information Disclosure Statement was first cited in a communication from a Foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement.

Respectfully submitted,  
PEARNE & GORDON LLP

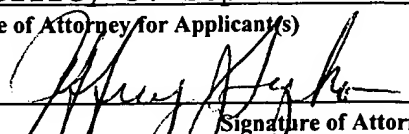
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January 10, 2003

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents, Washington, D.C. 20231 on the date indicated below.

Jeffrey J. Sopko  
Name of Attorney for Applicant(s)  
01/10/2003  
Date  
  
Signature of Attorney

# The Patent office of the People's Republic Of China

Address: No. 6 XITUCHENG ROAD, JIMEN BRIDGE, HAIDIAN DISTRICT, BEIJING

Post Code: 100088

Applicant: <b>MATSUSHITA ELECTRIC INDUSTRIAL CO. LTD.</b>	ISSUING DATE:
Agent: <b>Xiaoshu Li</b>	
Application No.: <b>98114869.7</b>	
Title: <b>LIQUID CRYSTAL DISPLAY DEVICE</b>	

## THE FIRST OFFICE ACTION

1. ☒ The applicant filed a request for substantive examination on Year\_\_\_\_Month\_\_\_\_Day\_\_\_\_according to Article 35 Paragraph 1 of the Patent Law. The examiner has conducted a substantive examination to the above-mentioned patent application.  
☐ According to Article 35 paragraph 2 of the Patent Law, Chinese Patent office decided on its own initiative to conduct a substantive examination to the above-mentioned patent application.
2. ☒ The applicant requested to take  
Year 1997 Month 05 Day 23 on which an application is filed with the JP patent office as the priority date.  
Year\_\_\_\_Month\_\_\_\_Day\_\_\_\_on which an application is filed with the\_\_\_\_patent office as the priority date.  
Year\_\_\_\_Month\_\_\_\_Day\_\_\_\_on which an application is filed with the\_\_\_\_patent office as the priority date.  
☒ The applicant has submitted the copy of the earliest application document certified by the competent authority of that country.  
☐ According to Article 30 of the Patent Law, if the applicant has not yet submitted the copy of the earliest application document certified by the competent authority of that country, the declaration for Priority shall be deemed not to have been made.  
☐ This application is a PCT application.
3. ☐ The applicant submitted the amended document(s) on Year\_\_\_\_Month\_\_\_\_Day\_\_\_\_and Year\_\_\_\_Month\_\_\_\_Day\_\_\_\_after examination, \_\_\_\_\_submitted on Year\_\_\_\_Month\_\_\_\_Day\_\_\_\_is/are not accepted.  
\_\_\_\_\_submitted on Year\_\_\_\_Month\_\_\_\_Day\_\_\_\_is/are not accepted  
because the said amendment(s) ☐ is/are not in conformity with Article 33 of the Patent Law.  
☐ is/are not in conformity with Rule 51 of the Implementing Regulations..  
☐ The concrete reason(s) for not accepting the amendment(s) is/are presented on the text of Office Action.
4. ☒ The examination has been conducted based on the application text as originally filed.  
☐ The examination has been conducted based on the following text(s):  
page(s)\_\_\_\_of the specification, Claim(s)\_\_\_\_, and abstract and it's figure(s)\_\_\_\_in the original text of the application submitted on the filing day.  
page(s)\_\_\_\_of the specification, claim(s)\_\_\_\_, and figure(s)\_\_\_\_in the amended text under Article 28 or 41 of PCT.  
page(s)\_\_\_\_of the specification, claim(s)\_\_\_\_, and figure(s)\_\_\_\_submitted on Year\_\_\_\_Month\_\_\_\_Day\_\_\_\_, abstract and it's figure submitted on Year\_\_\_\_Month\_\_\_\_Day\_\_\_\_.
5. ☐ This notification was made without undergoing search.  
☒ This notification was made with undergoing search.  
☒ The following reference document(s) is/are cited:(the reference numeral(s) thereof will be used in the examination procedure hereafter)

NO.	Reference No. or Title	Publishing Date
1	US5130832A	19920714
2	EP0757277A1	19970205
3		
4		
5		

6. Concluding comments

☒ on the specification:

- ☐ The contents of the application are in contrary to Article 5 of the Patent Law and therefore are not patentable.
- ☐ The contents of the application do not possess the practical applicability as prescribed in Paragraph 4 of Article 5 of the Patent Law.
- ☐ The specification is not in conformity with the provision of Paragraph 3 of Article 26 of the Patent Law.
- ☒ The presentation of the specification is not in conformity with the provision of Rule 18 of the Implementing Regulations.
- ☒ The presentation of the specification is not in conformity with the provision of Rule 19 of the Implementing Regulations.

☒ on the claims:

- ☐ Claim(s) \_\_\_\_\_ belong(s) to non-patentable subject matter as prescribed in Article 25 of the Patent law.
- ☐ Claim(s) \_\_\_\_\_ do(es) not comply with the definition of a patent as provided in Rule 2 paragraph 1 of the Implementing Regulations.
- ☐ Claim(s) \_\_\_\_\_ do(es) not possess novelty as requested by Article 22 paragraph 2 of the Patent Law.
- ☒ Claim(s) 1-3 do(es) not possess inventiveness as requested by Article 22 paragraph 3 of the Patent Law.
- ☐ Claim(s) \_\_\_\_\_ do(es) not possess practical applicability as requested by Article 22 paragraph 4 of the Patent Law.
- ☐ Claim(s) \_\_\_\_\_ do(es) not comply with the provision of Article 26 paragraph 4 of the Patent Law.
- ☐ Claim(s) \_\_\_\_\_ do(es) not comply with the provision of Article 31 paragraph 1 of the Patent Law.
- ☒ Claim(s) 1,10 do(es) not comply with provision of Rules 20 to 23 of the Implementing Regulations.
- ☐ Claim(s) \_\_\_\_\_ do(es) not comply with the provision of Article 9 of the Patent Law.
- ☐ Claim(s) \_\_\_\_\_ do(es) not comply with the provision of Rule 12 paragraph 1 of the Implementing Regulations.

The detailed analysis for the above concluding comments is presented on the text of this Office Action:

7. Based on the above concluding comments, the examiner is of the opinion that

- ☐ The applicant should amend the application document(s) in accordance with the requirement as specified in the Office Action.
- ☒ The applicant should, in his observation, expound the patentability of the application of the application, amend the defects pointed out in the Office Action; or the application can hardly be approved.
- ☐ The examiner deems that the application lacks substantive features to make it patentable. Therefore, the application will be rejected if no convincing reasons are provided to prove its patentability.

8. The applicant should pay attention to the following matters:

- (1) According to Article 37 of the Patent Law, the applicant is required to submit his observations within 4 months upon receipt of this Office Action. If the time limit for making response is not met without any justified reason, the application to have been withdraw.
- (2) The amendment(s) made by the applicant must meet the requirements of Article 33 of the Patent Law. The amended text should be in duplicate, its format should conform to the related confinement in the Guidance for Examination.
- (3) The applicant and/or the agent should not go to the Chinese Patent Office to interview the examiner without being invited.
- (4) The observation and/of the amended document(s) must be mailed or delivered to the Receiving Section of the Chinese Patent Office. No legal effect shall apply for any document(s) that not mailed to or reached the Receiving Section.

9. The text of this Office Action contains 3 page(s), and has the following attachment(s):

☒ 2 copies of the cited references, all together 22 pages.

☐

Examination Dept. No. \_\_\_\_\_ Examiner \_\_\_\_\_ Seal of Examination Dept. for business only \_\_\_\_\_

(if the Office Action wasn't stamped by the specified seal, it has no legal effect)

## Text of the First Office Action

The present application relates to a liquid crystal display device. According to the disclosure of the description, the technical problem to be solved is to provide a liquid crystal display device that surely shield or absorb the light which reaches the liquid crystal driver so that erroneous display due to the photoelectric effect of the liquid crystal driver can be avoided. After examination, the specific opinions are provided as follows:

### (I)

1. Claim 1 is for a liquid crystal display device. Reference D1 (refer to description, column 3, line 37-column 4, line 27; Fig. 2) has disclosed a display device against the detrimental build-up of heat and the irradiation of light and specifically has disclosed the following technical features: the display device comprises a liquid crystal panel constituted by a smaller plate (refer to a first plate, reference sign 31) disposed on a displaying side, a larger plate (refer to a second plate, reference sign 32) disposed on a reverse side of the displaying side, and liquid crystal (33) held therebetween; a liquid crystal driver (36) electrically connected with the liquid crystal panel through projecting electrodes (35); a light shielding material (38) disposed on the displaying side of said liquid crystal driver so as to prevent an outer light from being incident to said liquid crystal driver. In view of stated above, D1 has essentially disclosed the technical features of the claim and the difference therebetween is just that a liquid crystal driver is electrically connected with the liquid crystal panel through a circuit pattern disclosed in the claim, while through a projecting electrode in Reference 1. For those of ordinary skill in the art, a projecting electrode in Reference 1 and the same with a circuit pattern in the claim have the same effect, that is, connecting a liquid crystal driver with the liquid crystal panel. At the same time the technical problem solved by the application is to shield or absorb the light that reaches the liquid crystal driver, the key of which is the light shielding material. However the aforesaid technical feature which distinguish it from Reference 1 does not belong to the essential technical feature for solving the technical problem. Therefore with respect to the technical solution disclosed by Reference 1, the technical solution sought for protection in the claim does not possess substantive feature and represent a notable progress, which does not comply with the provision of Article 22, paragraph 3 of the Patent Law of China. Thus it does not possess inventiveness.

At the same time claim 1 lacks the indispensable technical features for solving technical problems, which does not comply with the provision of Rule 21, paragraph 2 of the Implementing Regulations of the Patent Law of China. The claim is for a liquid crystal display device, and with respect to the prior art, the technical problem to

be solved is to shield or absorb the light that reaches the liquid crystal driver, wherein the light shielding material disclosed by the claim can merely prevent an outer light from being incident to the liquid crystal driver, while do nothing to the outer light below the liquid crystal driver penetrating through the liquid crystal panel. Therefore the following technical features is indispensable, "a diffusion sheet located at the displaying side of said liquid crystal display panel, composed of a light diffusing area and a light absorbing area located on the outer periphery thereof, the light diffusing area serving to diffuse illumination light from a light source to the liquid crystal display panel, and the light absorbing area serving to absorb the extraneous light incident on said liquid crystal driver", and the applicant should add them into claim 1.

2. The additional technical feature of dependent claim 2 is that "said liquid crystal driver is mounted on the reverse side of the first plate, and said light shielding material comprises a light shielding film affixed to the displaying side surface of said first plate so as to cover an area which is opposite to a mounting position of said liquid crystal driver". The aforesaid technical features have been disclosed by Reference D2 (in the description, column 5, line 41-column 6, line 49; Fig. 1). D2 has disclosed a liquid crystal display element. In view of D2, the liquid crystal driver (reference numeral of 130) of the liquid crystal display element is mounted on the reverse side of the first plate (112); light shielding panel (10), disposed on the displaying side surface so as to cover an area which is opposite to a mounting position of said liquid crystal driver. Just as stated above, those of ordinary skill in the art can gain enlightenment to the technical solution of claim 2, in connection with the technical solution of Reference 1 and Reference 2, that is, for those of ordinary skill in the art, the combination is obvious. Therefore, on the premise that claim 1 referred to does not possess inventiveness, dependent claim 2, the further definition thereof, does not possess substantive feature and represent a notable progress with respect to the combination of technical solution of Reference 1 and Reference 2, which does not comply with the provision of Article 22, paragraph 3 of the Patent Law of China. Thus it does not possess inventiveness.

3. The additional technical feature of dependent claim 3 is that, "said liquid crystal driver is mounted on the display side of the second plate, and said light shielding material comprises a light shielding film affixed to the displaying on said liquid crystal driver". The aforesaid technical features have been disclosed by Reference 1(the description, column 37, line 37-column 4, line 27; Fig. 2). In view of D1, the liquid crystal driver (reference numeral of 36) within the display element is mounted on the displaying side of the larger panel; said light shielding panel (38) is affixed on the displaying side surface of said liquid crystal driver. Therefore, on the premise that claim 1 referred to does not possess inventiveness, dependent claim 3, the further definition thereof, does not possess substantive feature and represent a notable progress, which does not comply with the provision of Article 22, paragraph 3 of the Patent Law of China. Thus it does not possess inventiveness.

4. Dependent claim 10 is not clear and does not comply with the provision of Rule 20, paragraph 1 of the Implementing Regulations of the Patent Law of China. The characterizing portion of the claim is that "said light shielding film, light absorbing area of said diffusion sheet are colored in black", and the claim refers to the preceding claim 9, however, concept "light shielding film" is not shown in claim 9, which renders the claim unclear. The applicant should make amendment for this.

(II)

1. In accordance with the provision of Rule 18 of the Implementing Regulations of the Patent Law of China, the description shall contain five portions: technical field, background art, contents of the invention, description of figures and mode of carrying out the invention or utility model; moreover each of the parts shall be preceded by a heading.
2. Stating error, being omitted.
3. The reference numeral "20" in the Fig. 1 which denotes the liquid display panel should be "10".
4. The reference numerals in the abstract should be bracketed.

(III)

In summary, the present application can not be granted the right of patent. The applicant should present observations or make amendments in accordance with opinions of the present office action, and moreover state the reasons that amended claims possess inventiveness with respect to the aforesaid technical features of the References so as to overcome the aforesaid defects; otherwise the application shall be rejected.